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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/626,488	07/24/2003	Edward E. Horton III	713-54-PA	1993

22145 7590 07/12/2005

KLEIN, O'NEILL & SINGH  
2 PARK PLAZA  
SUITE 510  
IRVINE, CA 92614

EXAMINER
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BEACH, THOMAS A

ART UNIT	PAPER NUMBER
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3671

DATE MAILED: 07/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/626,488

Applicant(s)

HORTON, EDWARD E.

Examiner

Thomas A. Beach

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on amendment filed 04/28/05.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3,4,8,11-13 and 16 is/are rejected.
- 7) ☒ Claim(s) 5-7,9,10,14,15,17 and 18 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. Claims 1, 3, 4, 8, 11, 12, 13 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pollack 4,637,335 in view of Thiebaud et al 6,082,391. Pollack shows a bottom tensioned riser system for conveying petroleum from an offshore oil well on a sea floor to a platform floating above, the riser system having a tubular conduit 14 suspended from the platform and having a bottom end extending downward therefrom in a substantially vertical direction and toward the sea floor; and, a connection and tensioning assembly disposed at the bottom end 36 of the conduit, the connection and tensioning assembly having a flexible jumper 54 connecting the bottom end of the conduit to the well; a weight 40 applying a vertical tension in the conduit; and, means 38 for constraining the bottom end of the conduit against horizontal movement (beyond the length of the chains), while enabling the conduit to move freely in a vertical direction (figure 2) and to pivot (pivotal connection of the chains 38 to base 36) freely about the bottom end thereof in response to motions of the platform. Pollack does not show a conduit with a plurality of risers disposed in a single larger casing with a core that is surrounded by the riser. However, Thiebaud shows a similar bottom tensioned riser system for conveying petroleum from an offshore oil well on a sea floor to a platform floating above, the riser system with a conduit 88 with a plurality of risers 22 (claim 3) disposed in a single larger casing with a core 23 (claim 4) that is surrounded by the riser (figure 9). Therefore, it would have been obvious to one of ordinary skill in the art at the

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time the invention was made to modify Pollock, as taught by Thiebaud, to include a plurality of risers to accommodate the plurality of hydrocarbon fluids and service fluids to enable the well to be efficiently utilized. As concern claim 11, the combination shows a steel or elastomer jumper (since it is shown as bendable), which carries hydrocarbons (Pollack, fig 2).

As concerns claims 8, 12 and 16, it would have been an obvious matter of design choice to modify the combination to include the tension range of 1.05 to 1.2 times the weight of the conduit or the jumper to include the range in bend having a radius of 5-10 times the diameter of the conduit since applicant has not disclosed that these ranges solve any particular problem or purpose and it appears other similar ranges would work equally well. Furthermore, routine experimentation would lead one of ordinary skill in the art to these ranges.

### ***Allowable Subject Matter***

2. Claims 5-7, 9-10, 14, 15, 17 and 18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas A. Beach whose telephone number is

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571.272.6988. The examiner can normally be reached on Monday-Friday, 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Will can be reached on 571.272.6998. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Thomas A. Beach

July 8, 2005

**THOMAS A. BEACH**  
Patent Examiner  
Group 3600